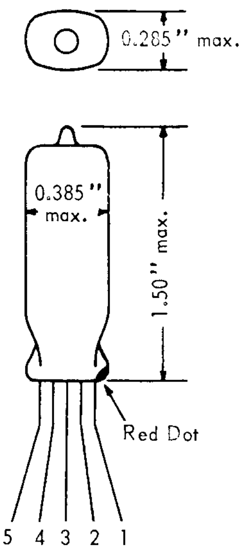
SUBMINIATURE PENTODE

TYPE CK5678

Excellence in Electronics

The CK5678 is a filament type, fully shielded, subminiature pentode designed for service in RF applications requiring economy of space, weight, and battery drain. The flexible terminal leads may be soldered or welded directly to the terminals of circuit components without the use of sockets. Standard inline subminiature sockets may be used by cutting the leads to a suitable length.



MECHANICAL DATA

ENVELOPE: T-2X3 Glass ●

BASE: None (0.016" tinned flexible leads. Length: 1.5" min. Spacing: 0.048" center-to-center.)

TERMINAL CONNECTIONS: *(Red dot is adjacent to Lead 1)*

- Lead 1 Plate
- Lead 2 Grid #2
- Lead 3 Filament, negative; Shield; Grid #3 ■
- Lead 4 Grid #1
- Lead 5 Filament, positive; Grid #3 ■

MOUNTING POSITION Any

ELECTRICAL DATA DATA

DIRECT INTERELECTRODE CAPACITANCES: (μμfds.)

Grid to Plate	0.01 max.
Input	3.3
Output	3.8

RATINGS - ABSOLUTE MAXIMUM VALUES:

Filament Voltage (dc)	1.25±20% volts
Plate Voltage	90 volts
Grid #2 Voltage	67.5 volts

CHARACTERISTICS AND TYPICAL OPERATION - CLASS A1 AMPLIFIER:

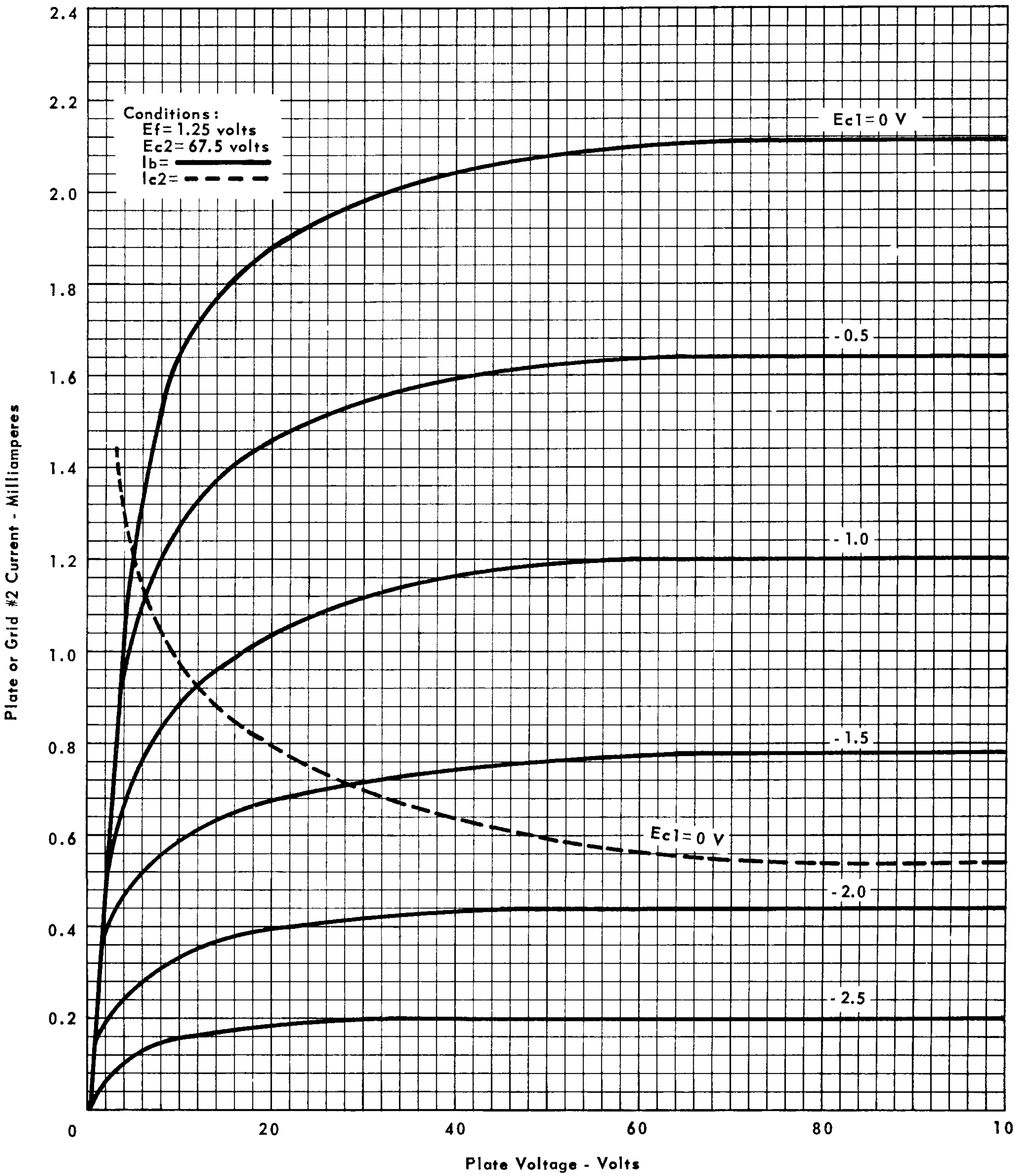
Filament Voltage (dc)	1.25	1.25	volts
Filament Current	50	50	ma.
Plate Voltage	45	67.5	volts
Grid #2 Voltage	45	67.5	volts
Grid #1 Voltage ♦	0	0	volts
Plate Resistance	1.2	1.0	meg.
Transconductance	820	1100	μmhos
Plate Current	0.8	1.8	ma.
Grid #2 Current	0.22	0.48	
Grid #1 Voltage (approx.) for Gm= 10 μmhos	-3	-4	volts

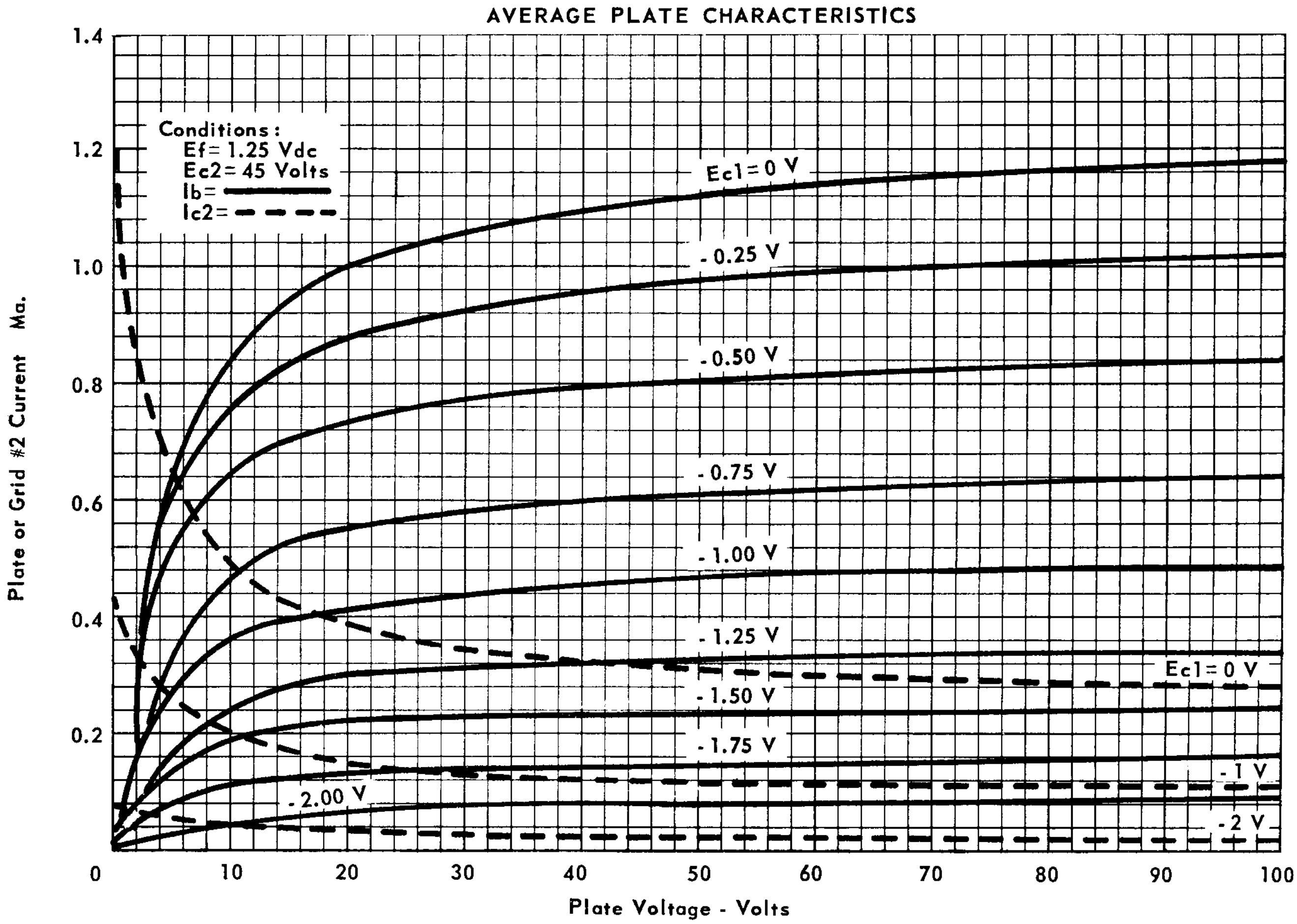
● *Bulb is entirely coated with a metallic shield connected to Lead 3.*

■ *Grid #3 is comprised of two separate deflector plates, one of which is connected to lead 3 and the other to lead 5.*

♦ *Grid resistor= 5 megohms.*

AVERAGE PLATE CHARACTERISTICS

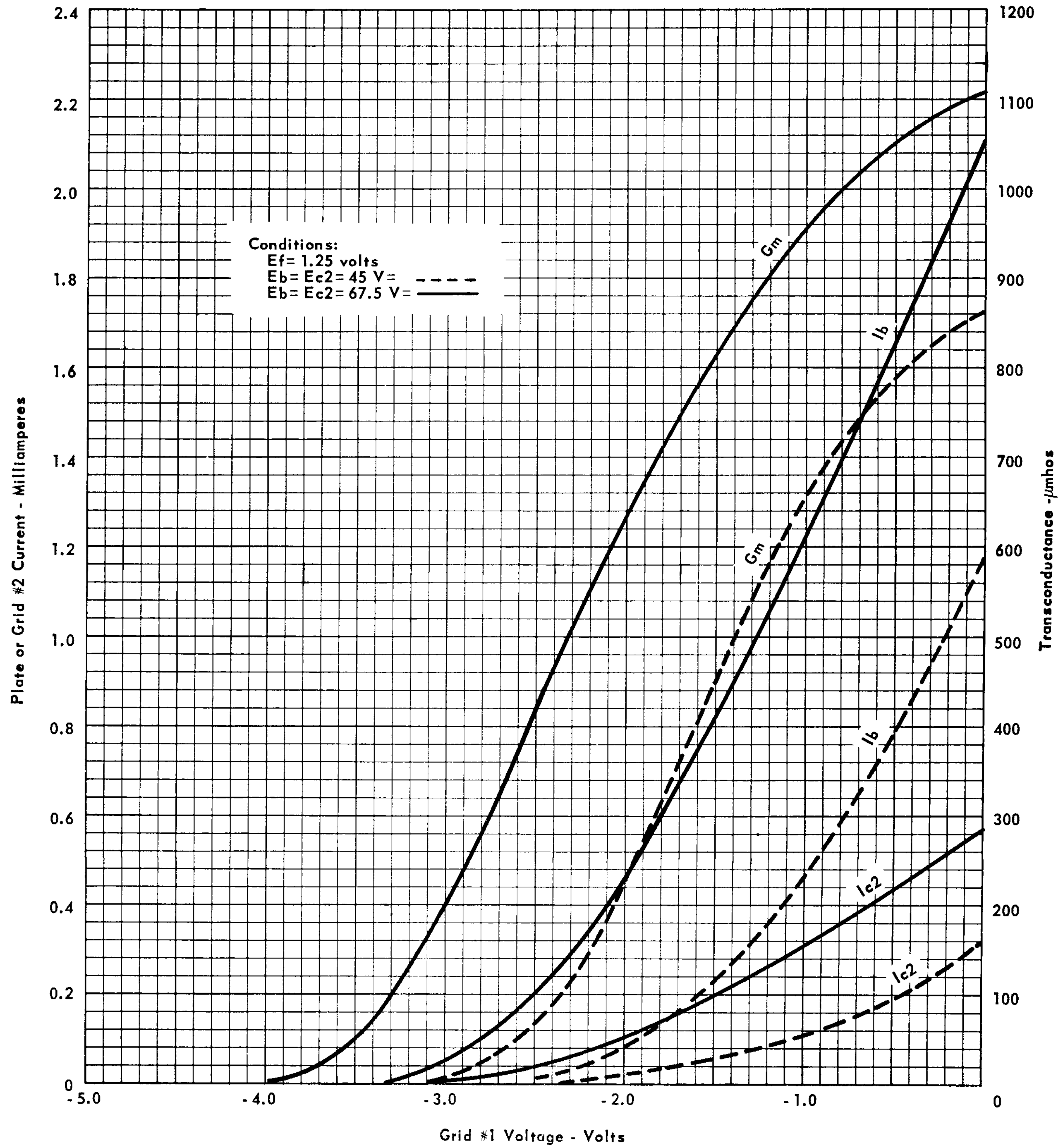



AVERAGE PLATE CHARACTERISTICS
Conditions:
Ef = 1.25 Vdc
Ec2 = 45 Volts
Ib =
Ic2 =
Ec1 = 0 V
- 0.25 V
- 0.50 V
- 0.75 V
- 1.00 V
- 1.25 V
- 1.50 V
- 1.75 V
- 2.00 V
Ec1 = 0 V
- 1 V
- 2 V
Plate or Grid #2 Current Ma.
1.4
1.2
1.0
0.8
0.6
0.4
0.2
0
10
20
30
40
50
60
70
80
90
100
Plate Voltage - Volts

RAYTHEON

SUBMINIATURE PENTODE

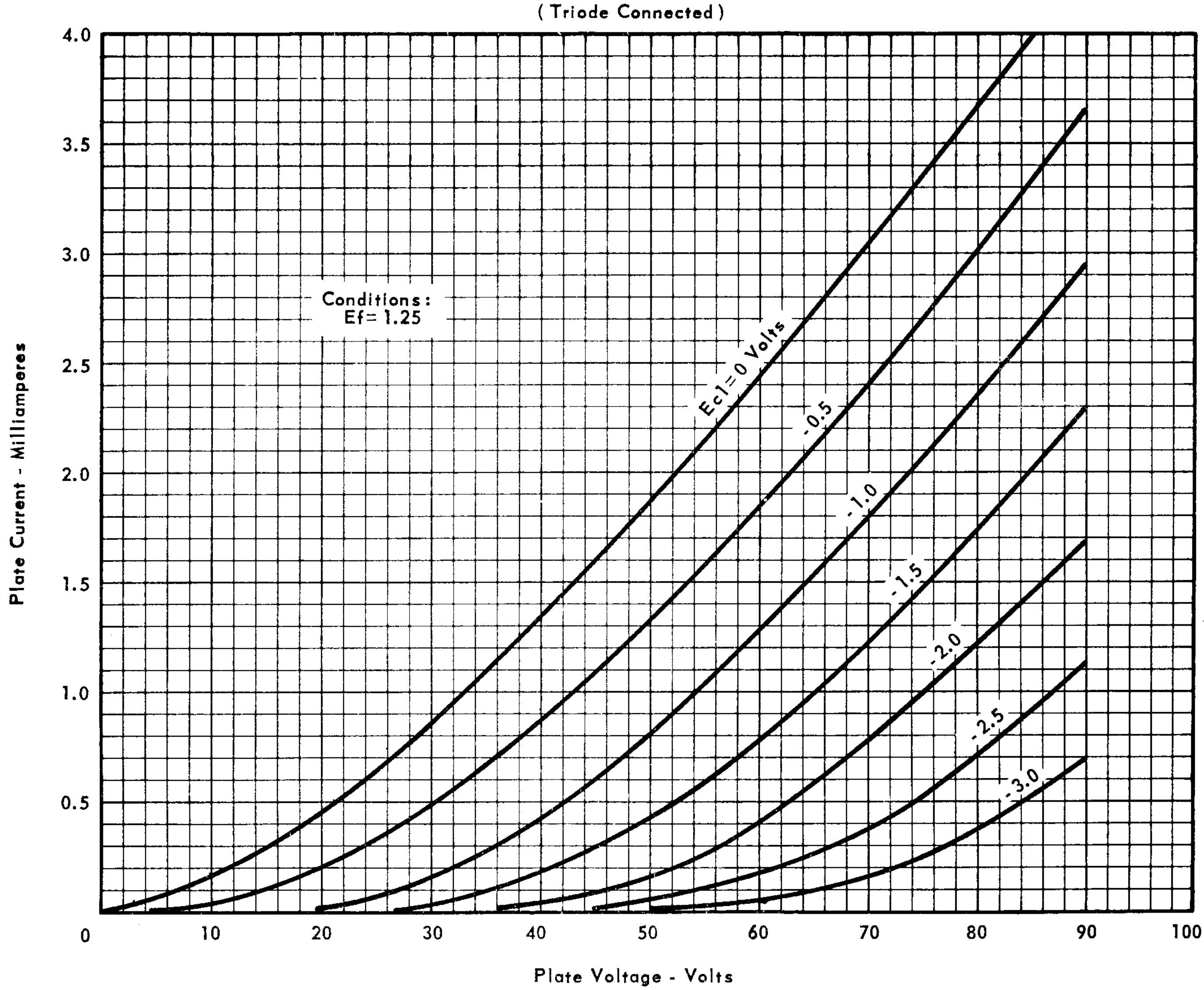
AVERAGE CHARACTERISTICS



SUBMINIATURE PENTODE

AVERAGE PLATE CHARACTERISTICS

(Triode Connected)



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